

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01D53/94 F01N3/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B01D F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 984 142 A (TOYOTA JIDOSHA KK) 8 March 2000 (2000-03-08)	1,2,5,9
A	paragraph '0014! - paragraph '0016!; claims; figure 2	3,4,6-8, 10,11
X	US 5 492 679 A (FRANK AMENT ET AL.) 20 February 1996 (1996-02-20)	1
A	column 3, line 35 - column 4, line 2; figures 2,3	2-11
A	WO 01/12320 A (JOHNSON MATTHEY PUBLIC LTD COMP) 22 February 2001 (2001-02-22) claims; figure 1	1-11
A	DE 198 20 828 A (DAIMLERCHRYSLER) 18 November 1999 (1999-11-18) cited in the application claims	1-11

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

13 October 2004

Date of mailing of the international search report

20/10/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 773 354 A (TOYOTA JIDOSHA KK) 14 May 1997 (1997-05-14) cited in the application claims -----	1-11
A	EP 1 033 161 A (DORNIER GMBH) 6 September 2000 (2000-09-06) claims; figures 1,2 -----	1-11
A	EP 1 147 802 A (KEMIRA METALKAT OY) 24 October 2001 (2001-10-24) -----	

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0984142	A	08-03-2000	DE	69824847 D1	05-08-2004
			EP	0984142 A1	08-03-2000
			JP	3248187 B2	21-01-2002
			US	6367246 B1	09-04-2002
			WO	9848153 A1	29-10-1998
US 5492679	A	20-02-1996	DE	19539728 A1	30-04-1997
WO 0112320	A	22-02-2001	EP	1133355 A1	19-09-2001
			WO	0112320 A1	22-02-2001
			US	2004175315 A1	09-09-2004
			US	6753294 B1	22-06-2004
DE 19820828	A	18-11-1999	DE	19820828 A1	18-11-1999
			DE	59900369 D1	06-12-2001
			EP	0957242 A2	17-11-1999
			JP	3108919 B2	13-11-2000
			JP	2000027634 A	25-01-2000
			US	6176079 B1	23-01-2001
EP 0773354	A	14-05-1997	JP	9133032 A	20-05-1997
			DE	69616235 D1	29-11-2001
			DE	69616235 T2	27-06-2002
			EP	0773354 A1	14-05-1997
			US	5782087 A	21-07-1998
EP 1033161	A	06-09-2000	DE	19908023 A1	31-08-2000
			DE	59909112 D1	13-05-2004
			EP	1033161 A1	06-09-2000
EP 1147802	A	24-10-2001	FI	20000854 A	11-10-2001
			EP	1147802 A1	24-10-2001
			US	2002013226 A1	31-01-2002